



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/433,609	11/02/1999	ETIENNE BARNARD	47898-056	2771
2101	7590	07/28/2006	EXAMINER	
BROMBERG & SUNSTEIN LLP 125 SUMMER STREET BOSTON, MA 02110-1618			ARMSTRONG, ANGELA A	
		ART UNIT	PAPER NUMBER	
			2626	

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/433,609	BARNARD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Angela A. Armstrong	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 April 2002.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-3 and 6-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Sejnoha (US Patent No. 6,260,013).
3. Sejnoha disclose a speech recognition system employing discriminatively trained speech models.
4. Regarding claims 1, 12, 14 and 16, Sejnoha discloses receiving correct alignment data that represents a correct segment alignment of an utterance that was received by the speech recognition system (col. 8, line 54 to col. 10, line 7; col. 10, lines 17-24); receiving wrong alignment data that represents an alignment of the utterance that is known to be incorrect based on information received from the speech recognition system and describing the utterance (col. 8, line 54 to col. 10, line 7; col. 10, lines 17-24); identifying a first phoneme in the correct alignment data that corresponds to a second phoneme in the wrong alignment data and in which the first phoneme received a worse recognizer score than the second phoneme (col. 8, line 54 to col. 10, line 24); modifying a first acoustic model of the first phoneme by moving at least one mean value thereof closer to the feature values used to score the first phoneme (col. 9, line 30 to col. 12, line 29).

5. Regarding claims 2, 8-11, 13, 15, 17, and 19-20, Sejnoha discloses the speech recognition system provides for model adaptation with implementation of mean values at col. 9, line 30 continuing to col. 12, line 29.

6. Regarding claim 3, Sejnoha discloses receiving correct alignment data that represents a segment alignment of a less than highest scoring hypothesis among n-best hypotheses of an utterance that was received by the speech recognition system (col. 8, line 54 to col. 10, line 24).

7. Regarding claim 6, Sejnoha discloses iteratively repeating the identifying and modifying steps for all phonemes in the correct alignment data that correspond to one or more phonemes in the wrong alignment data (col. 8, line 54 to col. 10, line 7; col. 10, lines 17-24).

8. Regarding claim 7, Sejnoha discloses iteratively repeating the identifying and modifying steps for all phonemes in the wrong alignment data that correspond to one or more phonemes in the correct alignment data (col. 8, line 54 to col. 10, line 7; col. 10, lines 17-24).

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sejnoha in view of Roberts et al (US Patent No. 5,027,406).

11. Regarding claims 4 and 5, Sejnoha teach everything as claimed in claimed 1. Sejnoha does not teach user confirmation for indicating a correct or incorrect recognition. Refer to Roberts et al

who teach an interactive speech recognition and training method, which allows for user confirmation of a recognized utterance, for the purpose of creating or updating an acoustic model of the word (abstract).

It would have been obvious to one of ordinary skill at the time of invention to modify the speech recognition adaptation system of Sejnoha to implement user confirmation of recognized utterances as suggested by Roberts, for the purpose of updating the acoustic model of the utterance, as suggested by Roberts, thereby improving the recognition performance of the system.

***Response to Arguments***

12. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

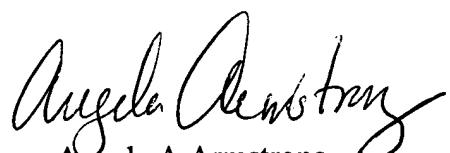
Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 571-272-7598. The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Angela A Armstrong  
Primary Examiner  
Art Unit 2626

AAA  
July 22, 2006